

## **A Previously Unreported Locality Record for the Gila Monster (*Heloderma suspectum*)**

Author(s): Jeff Lovich and Gordon Haxel

Source: Bulletin, Southern California Academy of Sciences, 110(2):59-62. 2011.

Published By: Southern California Academy of Sciences

DOI: <http://dx.doi.org/10.3160/1006.1>

URL: <http://www.bioone.org/doi/full/10.3160/1006.1>

---

BioOne ([www.bioone.org](http://www.bioone.org)) is a nonprofit, online aggregation of core research in the biological, ecological, and environmental sciences. BioOne provides a sustainable online platform for over 170 journals and books published by nonprofit societies, associations, museums, institutions, and presses.

Your use of this PDF, the BioOne Web site, and all posted and associated content indicates your acceptance of BioOne's Terms of Use, available at [www.bioone.org/page/terms\\_of\\_use](http://www.bioone.org/page/terms_of_use).

Usage of BioOne content is strictly limited to personal, educational, and non-commercial use. Commercial inquiries or rights and permissions requests should be directed to the individual publisher as copyright holder.

## A Previously Unreported Locality Record for the Gila Monster (*Heloderma suspectum*)

Jeff Lovich<sup>1</sup> and Gordon Haxel

U.S. Geological Survey, Southwest Biological Science Center, 2255 N. Gemini Drive,  
MS-9394 Flagstaff, AZ 86001-1600, jeffrey\_lovich@usgs.gov

---

Although the Gila Monster (*Heloderma suspectum*) is widely distributed throughout the Sonoran and portions of the Mojave Deserts of the southwestern United States and northwestern Mexico, details of its distribution in California are imperfectly known, due to the apparent rarity of the species in that state. In their review of Gila Monster records for California, Lovich and Beaman (2007) documented only 26 credible sightings during a period of 153 years. In May 2009 another sighting in California was documented by Ruppert (2010a, b) who photographed a specimen in the Providence Mountains, an area known for previous Gila Monster sightings (Lovich and Beaman 2007). In this paper we report the 28<sup>th</sup> credible record of a Gila Monster in California.

In their review of factors affecting the distribution of Gila Monsters in California, Lovich and Beaman (2007) noted that all previous records except one were east of approximately  $-116^\circ$  longitude, corresponding to that portion of the eastern Mojave Desert that receives more than 24 percent of annual precipitation during the warm season (1 July–14 October). They also noted that the majority of records with dates represented observations in April and May. Habitat varied but most observations occurred in mountainous terrain with rocky, incised topography ranging from near sea level to over 1,200 m. Many sightings were in riparian or xeroriparian areas. Based on the ecological attributes considered important in the distribution of the species, Brown and Carmony (1991) and Lovich and Beaman (2007) predicted that future sightings might be reported from the Granite<sup>1</sup>, Whipple, Turtle, and Chemehuevi Mountains of California. To date, that prediction has not been fulfilled to the best of our knowledge.

While conducting geological mapping for his Ph.D. dissertation (Haxel 1977), the junior author observed a Gila Monster at close range on the south side of Black Mountain in the southern Chocolate Mountains of southeasternmost California (Fig. 1), at an elevation of  $300 \pm 60$  m. This area is underlain mainly by quartzofeldspathic schist (Orocopia Schist), sandstone and argillite (Winterhaven Formation), rhyolite porphyry, conglomerate, basalt, sand and gravel, and colluvium. Much of the landscape is dominated by resistant outcrops and boulders of the basalt that caps Black Mountain. Vegetation, typical of the lower Sonoran Desert, is dominated by sparse creosote bush and cacti, with small ironwood and palo verde trees along drainage ways and washes. The date was 30 April, 1974, during the time of year when most Gila Monsters have been observed in California. The sighting location lies within the rectangle bounded by UTM gridlines E = 0701000 and 0703000, N = 3656000 and 3658000 (where E and N denote

---

<sup>1</sup> Corresponding author: USGS, Southwest Biological Science Center, 2255 N., MS 9394, Gemini Drive, Flagstaff, AZ 86001. Email: jeffrey\_lovich@usgs.gov

<sup>1</sup> It is unclear which Granite Mountain range was suggested by Brown and Carmony (1991) as there is one near the Turtle Mountains that already has a Gila Monster record (Tinkham 1971; Lovich and Beaman 2007) and another, farther north along Interstate 40, without known records.

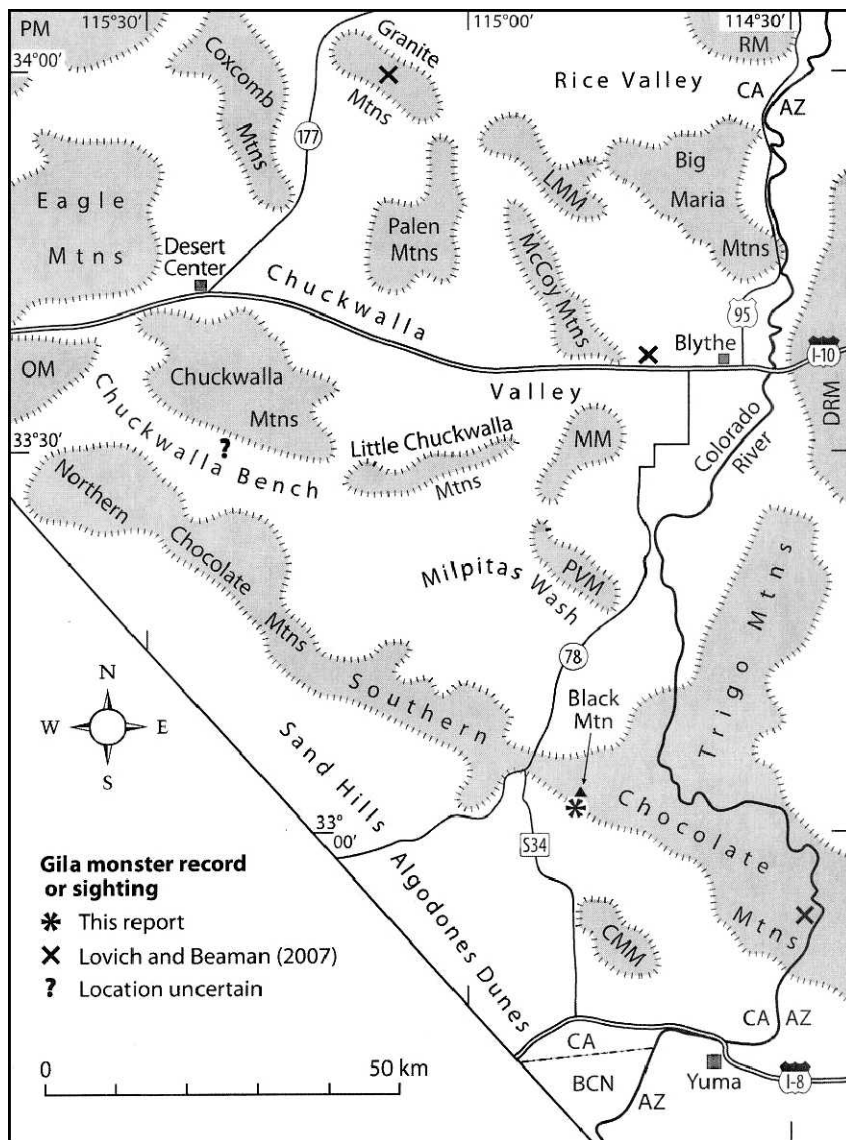


Fig. 1. The five Gila Monster records and sightings in the southeast corner of California. CMM, Cargo Muchacho Mountains; DRM, Dome Rock Mountains; LMM, Little Maria Mountains; MM, Mule Mountains; OM, Orocopia Mountains; PM, Pinto Mountains; PVM, Palo Verde Mountains; RM, Riverside Mountains.

easting and northing, the UTM zone is 11, and the datum is NAD 27). This area, in the Quartz Peak 7.5' quadrangle (1988), is  $\approx 2$  km south-southwest of the prominent cluster of communications towers on Black Mountain. Consistent with most other Gila Monster records for the state, this locality is east of  $-116^\circ$  longitude at about  $-114.83^\circ$ . Distances to the two closest records for California Gila Monsters reported by Lovich and Beaman (2007) to the location were  $\approx 38$  km (Imperial Dam) and  $\approx 65$  km (Blythe airport).

Assuming that the sighting was unremarkable at the time, Haxel made a casual annotation in the margin of his copy of Jaeger (1957) *The North American Deserts*, next

to the description of the Gila Monster. By the time of the sighting Haxel had been mapping in the southern Chocolate Mountains for more than two years, and was quite familiar with the only other large lizard species in the area, the Common Chuckwalla (*Sauromalus ater*). By late April, most days he was seeing chuckwallas regularly, and periodically watched through binoculars as they fed on desert vegetation. Since that time, Haxel has seen about a half dozen other Gila Monsters in Arizona; Nevada; and Sonora, Mexico further confirming his identification of the specimen seen in the Chocolate Mountains.

While compiling Gila Monster records for California, Lovich came across correspondence from Mr. Frank Hoover, a biologist formerly employed with the California Department of Fish and Game, suggesting another record from the region of the Chocolate Mountains. Mr. Hoover had a note in his files that was given to a colleague at an interagency meeting probably over 30 years ago (date unknown). The handwritten note states: “3 years ago we (two fellow rockhounds) saw a 4 foot long Gila monster coiled inside a hollow tree. Its body had about 6" diameter and filled the trunk hollow cavity – on the north side of the Chuckwalla Bench.” The writer of the note is unknown. Mr. Hoover considered it a sighting of a Gila Monster and forwarded it to another colleague as such.

The Chuckwalla Bench lies between the Chuckwalla Mountains to the north and the northern Chocolate Mountains to the south (Fig. 1), and inclines southward. Its northern edge is  $\approx 750$  m in elevation. The reported size of the animal is more than twice the record size for Gila Monsters (Beck, 2005) and the coiled posture noted suggests that the observers actually saw a large rattlesnake (*Crotalus* sp.). However, seeing a rattlesnake in the California desert is not an uncommon event, especially for rockhounds exploring the region, and a rattlesnake sighting would not be expected to result in a written report to a wildlife agency. Given that the Chuckwalla Bench is fairly close to the Chocolate Mountain record reported herein, and the records of Tinkham (1971) for California and Funk (1966) for nearby Arizona, it is possible that the observer actually saw a Gila Monster and greatly exaggerated its size, a common phenomenon when non-herpetologists see a large reptile (Pope 1961; see also <http://www.giantconstrictingsnakes.com/AcceptableEvidence.html>). We report the record in the interests of full disclosure and completeness because of its proximity to Haxel's sighting and leave it to the reader to decide its reliability. The Chuckwalla Bench and Chuckwalla Mountains are characterized by rocky, deeply incised topography, with scattered springs and extensive wash woodlands suggestive of Gila Monster habitat in Arizona (Beck, 2005), and would be good candidates for focused searches of this species in California, especially now that a credible record exists from the nearby Chocolate Mountains.

#### Acknowledgements

Earlier versions of this paper benefitted from comments offered by Erika Nowak and Caleb Loughran.

#### Literature cited

- Beck, D.D. 2005. Biology of Gila monsters and beaded lizards. University of California Press, Berkeley. 247 pp.
- Brown, D.E. and N.B. Carmony. 1991. Gila monster: facts and folklore of America's Aztec lizard. High Lonesome Books, Silver City, New Mexico. 130 pp.
- Funk, R.S. 1966. Notes about *Heloderma suspectum* along the western extremity of its range. *Herpetologica*, 22:254–258.

- Haxel, G. 1977. The Orocochia Schist and the Chocolate Mountain thrust, Picacho-Peter Kane Mountain Area, southeasternmost California. University of California, Santa Barbara. Ph.D. Dissertation. 277 pp.
- Jaeger, E.C. 1957. The North American Deserts. Stanford University Press. 308 pp.
- Lovich, J.E. and K.R. Beaman. 2007. A history of Gila monster (*Heloderma suspectum cinctum*) records from California with comments on factors affecting their distribution. Bulletin of the Southern California Academy of Science, 106(2): 39–58.
- Pope, C.H. 1961. The giant snakes: the natural history of the boa constrictor, the anaconda, and the largest pythons, including comparative facts about other snakes and basic information on reptiles in general. Alfred A. Knopf, New York. 290 +vi pp.
- Ruppert, R.M. 2010a. A recent sighting of a banded Gila monster, (*Heloderma suspectum cinctum*) in the Mojave National Preserve, California. Mojave National Preserve Science Newsletter, (1): 1–3.
- . 2010b. Geographic distribution: *Heloderma suspectum cinctum* (Banded Gila Monster). Herpetological Review, 41:107.
- Tinkham, E.R. 1971. The biology of the Gila monster. Pp. 387–421 in Venomous animals and their venoms. (W. Bücherl and E.E. Buckley, eds.) Academic Press, New York. 687 pp.